

STUDIES IN THE EUPATORIEAE (ASTERACEAE). CLVII.
A NEW GENUS, REVEALIA FROM MEXICO

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The generic revisions of the Eupatorieae for Mexico have been considered complete but a totally undescribed taxon has been collected recently in Guerrero by Drs. James Reveal and R. C. Broome with a group from the University of Maryland, College Park. The region is in the Sierra Madre del Sur, an area that has proven very floristically rich, and which is adjacent to regions where George B. Hinton made many of his collections.

The new genus cannot be mistaken for any of the previously known genera of the tribe though there is a vegetative habit resemblance to Oxylobus arbutifolius (H.B.K.) A. Gray but no close relationship. Actual relation can be seen in details of the anthers. The pollen is unusually large at 30μ in diameter and the median exothelial cells often have transverse walls without thickenings. Both characters are unique in the Eupatorieae to the group of genera including Cronquistia and Carphochaete. The new genus also shows the terete branches of the style with stigmatic lines toward the inside. The style type has previously been regarded as unique to Carphochaete, but the stigmatic lines do not reach near the tip of the style branch as in Carphochaete. The pappus and achene of the new genus are more similar to Cronquistia. The base of the style is distinctly enlarged which contrasts with Cronquistia but the enlargement is not as great as in Carphochaete.

The new genus differs from both Cronquistia and Carphochaete in a few features such as habit and the obtuse anther appendage without an apical notch. The most important difference is the presence of hairs on the inner surface of the corolla. In this trait the new genus is most similar to Stevia. The heads of Revealia also show asymmetry of the peripheral flowers which have the three outer lobes longer, a character also in some species of Stevia. In precise relationship Revealia seems to diverge from between Carphochaete and Cronquistia and the features in common with Stevia might be parallelisms.

Revealia stevioides R.M.King & H.Robinson, n. gen et sp (Eupatorieae) Asteracearum. Plantae frutescentes patentes usque ad 0.3 m altae, ramis patentibus dense

erecte ramulosis. Caules teretes vel subangulares virides minute rubro-puberuli, internodis plerumque 5-20 mm longis. Folia opposita sessilia anguste oblonga plerumque ca. 12 mm longa et 3-4 mm lata carnosae supra et subtus glandulo-punctata margine sparse minute puberula, nervis secundariis longitudinalis submarginalis indistinctis. Capitula in apicem ramularum solitaria, ca. 2 cm alta, pedicellis brevibus 3-10 mm longis; squamae involucri ca. 10 eximbricatae biseriatae ca. 7 mm longae 3-4 mm latae margine distincte scariosae apice abrupte mucronatae extus glandulo-punctatae subtiliter-multistriatae; flores ca. 10 in capitulo; corollae purpureae ca. 18 mm longae anguste-infundibulares extus glanduliferis, faucis intus hirsutis, lobis 5 intus papillosis extus laevibus, lobis 3 exterioribus longioribus ca. 5.5 mm longis, lobis interioribus ca. 4 mm longis; filamenta in parte superiore incrassata ca. 0.4 mm longa, cellulis oblongis, parietibus leniter annulate ornatis; thecae ca. 2.5 mm longae base breviter productae rotundatae, cellulis exothecialibus parietibus transversalibus in parte non noduliferis; appendices breviter ovatae obtusae tenues ca. 0.45 mm latae et 0.35 mm longae margine minute crenulatae; basi stylorum distincte nodulosi glabri; appendices stylorum teretes dense papillosae, lineis stigmaticis in superficiis interioribus. Achaenia prismatica ca. 7 mm longa 5-costata in costis minute setifera; carpodia brevia, cellulis minutis incrassatis ca. 6-seriatis; pappus brevis coroniformis ca. 0.4 mm longus laceratus. Grana pollinis ca. 30-32 μ diam. breviter spinosa.

Species typica: Revealia stevioides R.M.K et H.R.

TYPE: MEXICO: Guerrero: Sierra Madre del Sur, along the Millpillan-Atoyac road via Puerto del Gallo, about 60.5 miles northeast of Atoyac and 6.5 miles northeast of Puerto del Gallo, on steep rocky slopes and cliff faces, associated with numerous shrubs and scattered trees at about 10,500 ft elevation. Low spreading shrub to 3.0 m high with long, spreading branches; flowers purple. 19 October 1975. Reveal et al 4319 (Holotype US).

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CHEREPÉ, Sierra Madre del Sur, along the Milpillas-
Atzacac road via Puerto del Gallo.

James I. King & Robert M. Robinson
Raymond M. Hayes, et al. Kew Botanic 4219

Revealia stevioides R.M.King & H.Robinson,
Holotype, United States National Herbarium. Photos
by Victor E. Krantz, Staff Photographer, National
Museum of Natural History.



Revealia stevioides R.M.King & H.Robinson,
enlargement of head.